

ELECTRICAL DATA

A. General data

Radio-frequency range..... 3,800 to 4,200 mc/s
corresponding to wavelengths .. 7.9 to 7.1 cm
RF
Number of available channel pairs
as per frequency allocation
(Set A or B of equispaced frequencies) 6
Separation between the transmitting and
receiving frequencies of
an RF channel pair +) 213 mc/s
System value in transmitting
a multichannel baseband (carrier)..145 db (16.7 N)
a TV baseband 136 db (15.7 N)
Inside cross section of the
antenna feeder 58.2 mm x 29.1 mm
(2 9/32" x 1 5/32")

B. Modulation

Type of modulation Frequency modulation

1. Carrier baseband

(600 voice channels) 60 to 2,540 kc/s
Maximum frequency swing approx. \pm 4.5 mc/s
Mean channel swing \pm 280 kc/s
(200 kc/s RMS)

Relative input power level per channel:

Standard value - 15 db (-1.7 N)
adjustable between - 18 and - 14 db
(-2.1 to -1.6 N)

Relative output level

per channel - 15 \pm 0.5 db
(-1.7 \pm 0.05 N)

Input and output impedances Z = 75 Ω

Reflection attenuation

at carrier terminal > 20 db

2. Television baseband 0,01 to 5,000 kc/s

Maximum frequency swing (peak-to-peak) 8 mc/s

Video signal voltage at input:

Standard value 1 v peak-to-peak
adjustable between 0.7 and 1.3 v peak-to-peak

Video signal voltage

at output 1 v peak-to-peak \pm 0.5 %

Input and output impedances Z = 75 Ω

Reflection attenuation

at television terminal > 24 db

3. Service channel

(Frequency band) 50 to 5,000 c/s
Input level - 22.6 db (-2.6 N)

Output level - 14.8 db (-1.7 N)

+) For the frequency allocation refer to the table

C. Transmitter

Transmitting power 5 w
 Frequency instability
 at + 20 C ± 20 C ± 3 x 10⁻⁵
 IF input level 0.3 v
 Input impedance Z = 75 Ω

D. Receiver

Noise figure < 14 db
 Intermediate frequency 70 mc/s
 IF bandwidth ± 15 mc/s
 with a drop at the band edges by . . . approx. 5 %
 IF output level 0.6 v
 IF output impedance Z = 75 Ω

E. Power supply

Mains voltage 110 or 220 v
 Admissible mains voltage variations:
 For compliance with the specified
 performance data ± 2 %
 Operation still possible with ± 5 %
 temporarily (for approx. 10 sec) -10 %
 Mains frequency 48 to 62 c/s
 Input power of the radio bay in
 terminal operation 650 va
 in repeater operation 550 va
 Input power of the modulating bay 650 va

F. IF switching attachment

Frequency range 55 to 85 mc/s
 IF voltage at input 0.6 v
 IF voltage at output 0.6 v
 Input and output impedances Z = 75 Ω

Decoupling of a blocked path:

Diversity unit } 70 db { 28 N
 Feed-out and feed-in units } 52 db { 36 N

Highest switching rate

 of the diversity unit every 25 ms

Level drop with a
 given input signal < 1.3 db (< 0.15 N)

Transfer time of the diversity unit < 10 us

Power input: Diversity unit approx. 25 va
 Feed-out unit approx. 30 va
 Feed-in unit approx. 30 va

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